

Sclerosing lymphangitis of the penis

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Non-venereal sclerosing lymphangitis of the penis (NSLP) has been considered a rare condition, and only fourteen cases have been reported (Hoffmann, 1923, 1938; von Berde 1937; Nickel and Plumb, 1962; Kandil and Al-Kashlan, 1970). The disorder was originally described by Hoffmann (1923), who referred to it as 'simulation of primary syphilis by gonorrhoeal lymphangitis (gonorrhoeal pseudo-chancres)'. In a later paper Hoffmann (1938) called the condition a 'non-venereal plastic lymphangitis of the coronary sulcus of the penis with circumscribed edema'. The aetiology of the disorder is not known, but its non-venereal nature has been stressed in subsequent reports (Nickel and Plumb, 1962; Kandil and Al-Kashlan, 1970). It has been suggested that it may be related to mechanical trauma, virus infection, irritation by menstrual blood, or tuberculosis.

NSLP appears suddenly as a firm, cordlike, translucent lesion, which may almost encircle the penis in the coronal sulcus. The histological findings suggest that it results from fibrotic thickening of a large lymph vessel.

Our four cases were all seen during a period of 18 months, which suggests that the condition may be far more common than previously thought.

Case reports

Case 1, a 38-year-old car-driver, was referred to the Department of Dermatology 3 weeks after he had first noticed a painless cordlike lesion in the coronal sulcus. For the past 5 years he had noticed similar lesions of a milder degree on several occasions, but these had disappeared spontaneously within a few days. The present lesion had appeared 24 hours after prolonged sexual intercourse.

Examination

A cordlike elevated strand 4 to 7 mm. wide was seen to encircle the whole penile shaft (Fig. 1). On palpation the lesion was freely mobile and its consistency was very firm. On incision a yellow-brown cord with multiple bulbous formations could be seen under the skin. When the wall

of the lesion was perforated a clear yellowish fluid leaked out and the lesion became softer and smaller. A biopsy was taken from the wall of the lesion. After the operation, the lesion had clinically disappeared.



FIG. 1 Cordlike elevated strand in coronal sulcus of Case 1

Histology

The ducts were lined with a single row of endothelial cells and the walls markedly thickened with very few inflammatory cells (Figs. 2 and 3, overleaf). The appearance of the endothelium-lined dilatations was compatible with that of a lymphatic vessel.

Course

After the operation the patient remained symptomless for 3 months. Thereafter a similar lesion appeared, again after a period of strenuous sexual activity. It disappeared spontaneously after 3 weeks and the patient has now remained well for 9 months.

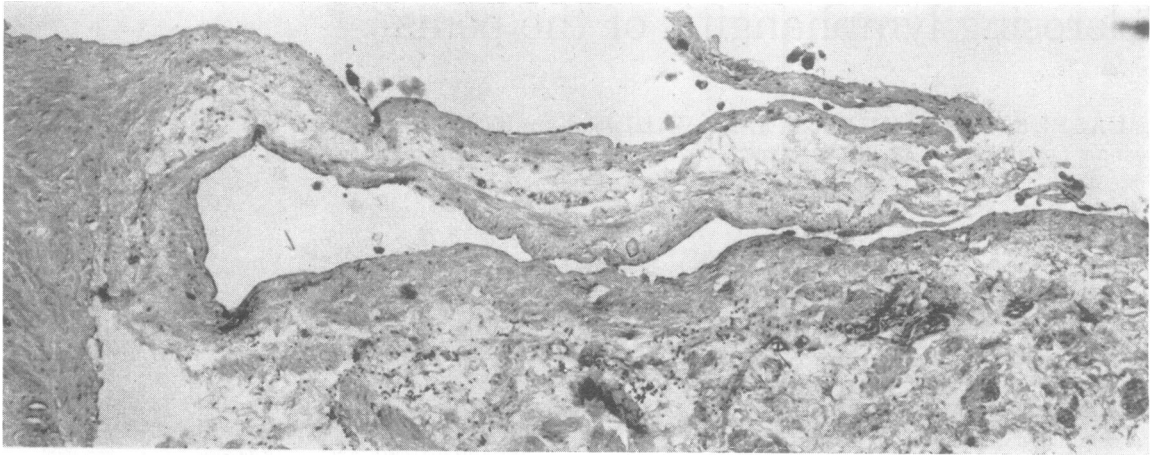


FIG. 2 *A dilated lymphatic vessel. Only a few inflammatory cells are present. Haematoxylin and eosin $\times 10$*

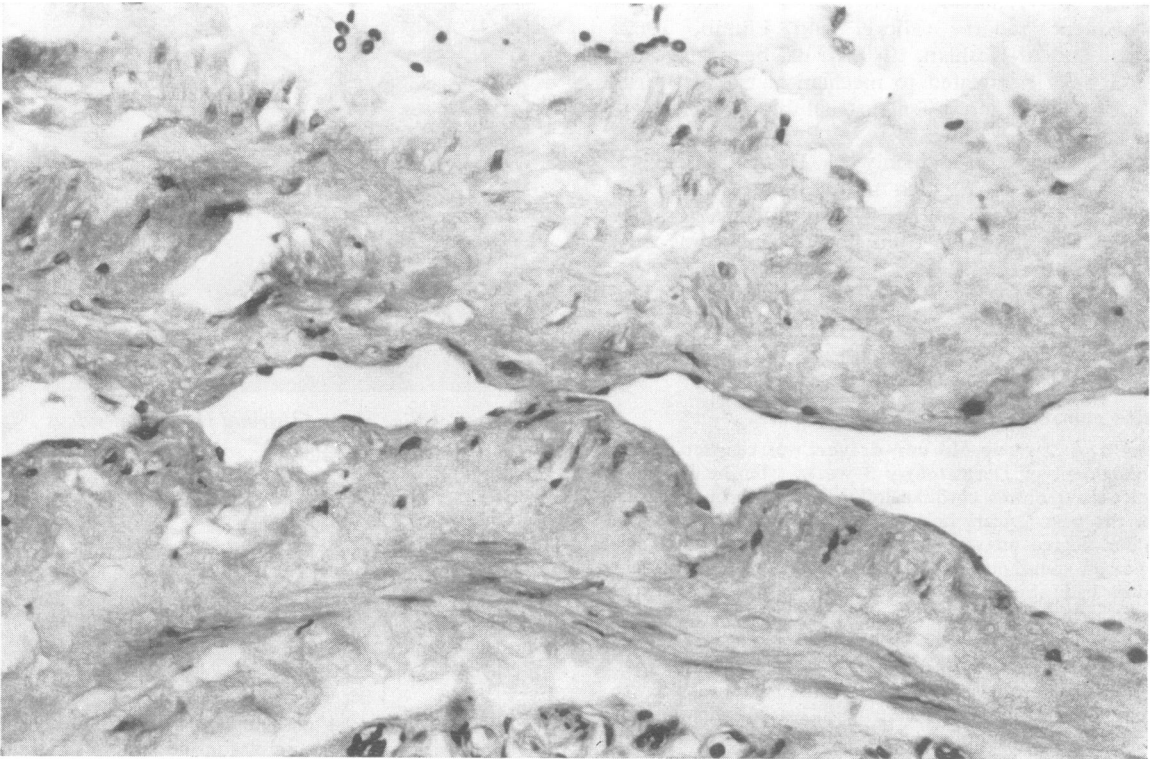


FIG. 3 *Walls of lymphatic vessel lined with one row of endothelial cells. The collagen bed of the vessel is oedematous. High-power view of Fig. 2 Haematoxylin and eosin $\times 100$*

Case 2, a 31-year-old tailor, noticed a penile lesion after a night of hard drinking and prolonged sexual intercourse. He consulted a general practitioner who punctured the lesion releasing a clear fluid. The lesion disappeared but reappeared after a few days. The patient was referred to the Department of Dermatology. A hard wormlike lesion identical with that in Case 1 was found (Fig. 4). The lesion disappeared without treatment within 3 weeks and did not recur during a follow-up period of 10 months.



FIG. 4 Lesions of sclerosing lymphangitis in Case 2

Case 3, a 32-year-old truck-driver, had noticed a hard strand in the coronal sulcus 6 weeks before attending the Department of Dermatology. The painless lesion had appeared after a period of frequent sexual intercourse (several times daily), and had remained unchanged for 4 weeks after which it gradually softened. When he was examined the cord could still be seen and felt on the dorsal side of the penile shaft. The lesion had gone 2 weeks later and did not recur during the ensuing 7 months.

Case 4, a 28-year-old economist, noticed a penile erosion in the coronal sulcus 2 days after sexual intercourse. A general practitioner treated him with oral penicillin and the erosion disappeared. Within a few days a hard strand developed at the same site and he then attended the Department of Venereal Diseases. A hard wormshaped lesion 2 cm. long was seen on the dorsum of the coronal sulcus. The VDRL slide test was negative. The lesion resolved without treatment after 4 weeks, and did not recur during a follow-up period of 5 months.

Discussion

Non-venereal sclerosing lymphangitis of the penis causes little physical discomfort to the patient and seems to resolve spontaneously within a relatively short period. This may explain why the condition is so seldom seen by a physician. It is probably not a very rare disorder since four cases were seen in this hospital during the course of 18 months.

Few of those affected consult a doctor because the condition is painless. It is significant that four of the fourteen cases previously reported were members of a medical staff (Kandil and Al-Kashlan, 1970). NSLP is also often misdiagnosed; two of our patients had been diagnosed as cases of induratio penis plastica.

Kandil and Al-Kashlan (1970) suggested that NSLP might be related to a virus infection, because both their patients were cured within 40 days after treatment with an antiviral agent. However, the lesion seems to disappear of its own accord without treatment.

Our four cases suggest that trauma is an important factor. In the first three cases unduly prolonged or frequent sexual intercourse preceded the appearance of NSLP, and in the fourth it developed after a penile erosion. Similar erosive changes were described by von Berde (1937). The most likely explanation of the phenomenon is traumatic obstruction of a large lymph vessel. This idea is supported by the histological findings, in which there were no obvious inflammatory changes. Some individuals may be prone to develop the condition, perhaps because of anatomical variations. One of our patients suffered from NSLP on several occasions during a period of 5 years.

Summary

Four cases of non-venereal sclerosing lymphangitis of the penis are presented. The lesions appeared suddenly, and in three cases followed prolonged or frequent sexual intercourse. Histological examination showed a thickened lymphatic vessel with very little inflammation. The condition resolved spontaneously within 2 months. It is suggested that the lesions may be related to mechanical trauma and that some individuals may be predisposed to develop the condition, perhaps because of anatomical variations.

References

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Lymphangite sclérosante de la verge

SOMMAIRE

Quatre cas de lymphangite sclérosante non vénérienne

de la verge sont présentés. La lésion était apparue soudainement et, pour trois cas, à la suite d'une coït prolongé ou répété. L'examen histologique a montré un épaississement des vaisseaux lymphatiques avec une très légère inflammation. La guérison survint spontanément en 2 mois. On pense qu'une telle lésion peut être en relation avec un traumatisme mécanique et que certains individus peuvent y être prédisposés, sans doute de fait de variations anatomiques.